Growing Perennials

Planting, Care and Maintenance

Since perennial beds are considered long term plantings, it is a good idea to have the soil tested to understand the nutrient balance before planting. Follow recommendations for adjusting the pH, phosphorous and potassium levels. It is important that these amendments be incorporated into the bed during soil preparation. The pH should be in the range of 6.0 to 6.8. Lime is used to raise the pH towards the more alkaline side while sulfur is used to lower the pH. If the pH needs to be adjusted, check the soil in the following year to make sure that it is stable. If a soil test is not done, then use a complete garden fertilizer like 5-10-10 or 5-10-5 at the rate of 2 pounds per 100 square feet. Nitrogen applications can be made yearly by broadcasting on the surface.

It is best prepare the planting site in the fall then, plant in the spring. This gives the plants plenty of time to develop a good root system before the winter. This will avoid winter damage. Soil preparation involves digging the bed to about 10 inches deep. Generally, the first digging should be done with a shovel or heavy garden fork. Tillers work well for the first 6 inches, however, are more difficult to use if you wish to go deeper. If the native soil is mostly clay, you should incorporate at least 4 to 6 inches of compost, leaf mulch or some other organic material which will improve soil drainage and aeration. Where this is not possible, consider constructing raised beds of new garden soil on top of the clay subsoil.

Once planted, the bed should receive a yearly application of mulch to retard moisture loss and buffer soil temperatures. It also will retard weed growth. Pine mulch, compost, bark or well rotted sawdust can all be used for this purpose.

Buying and Raising Plants

After you have selected the perennials for your garden, there are some choices to be made in acquiring the plants. Nurseries typically stock perennials in a variety of ways; as transplants in 4 or 6-inch pots or 1 gallon containers. Dormant or bare-rooted stock may also be purchased as well as smaller plants grown in trays or packs. The latter are usually less than one-year-old, but very reasonable to buy. The only thing to keep in mind is that smaller plants will take several years to develop into a full sized plant. Larger plants will be quicker to give you a mature garden, however, the cost may be considerably more. In addition, older plants will present a better display of foliage and possibly flowers so you know what you are buying.

Each plant that you buy should have good foliage and be as compact as possible. Plants in full bloom should be avoided since the plant's energy will have been spent on flower production and not on rooting which is very important for the first year. If flowers are present on the plants you bought, pinch them off. Many perennials like phlox, columbine and asters can be raised from seed in the fall, spring or summer. Seeds should be planted in a common soil mix at the recommended depth and spacing. The soil should be kept moist at all times taking care when watering to avoid washing the seed away. When seedlings emerge, they

can be taken outside and hardened off under the partial shade of a tree or under a shade cloth. The hardening off period may take 7 to 10 days before plants can be transplanted into the garden.

Planting

The best time to transplant is in the spring from April 1 through the 15th. Make a hole that gives the root system plenty of room for growth. The soil should be firmed in and around the plants ensuring good root to soil contact. Some settling may occur, so it is best at planting to raise the crown above the soil line just slightly prior to watering.

Fertilization

Assuming that some fertilizer has been incorporated into the bed as the soil was prepared, newly planted perennials should not need any other fertilizer until some evidence of new growth is observed. At this time, you can use a soluble or granular fertilizer like 10-10-10. It is better to cut the monthly rate in half and fertilize more frequently than apply a month's worth of nutrients all at once. Alternatively, you may wish to use an organic source of fertilizer like manure, cotton seed meal or blood meal. These are low sources of nitrogen and should be incorporated into the top 2 inches of soil.

Generally, perennials do not need much fertilizer and if you are striving for low maintenance plantings, an annual application about 4 weeks prior to flowering can be made for most perennials.

Maintenance

A good watering schedule especially for the first year is very important. The general practice of infrequent and deep watering should always be followed. Superficial and frequent watering will not promote a good root system. A 2-inch layer of leaf mulch applied in May or June will lessen the water demands during midsummer. Deeper layers should go onto the bed after the first frost to prevent winter damage due to soil heaving.

Since herbaceous perennials die back to the ground in the winter, it is generally not necessary to do much pruning with the exception of that required to remove dead material. You may wish to prune some plants very lightly taking off the growing tips during the early period after emergence in the spring. This is a kind of soft pinch which will cause plants to become more bushy and compact. This is especially important for garden mums and other plant which can get to be quite tall.

Plants which have a tall habit may need to be staked or supported with wire frames like those commonly used for garden vegetables. Plants which are positioned in the shade often become elongated. Support will prevent the plants from laying over as the flowers develop and become heavy as in the case of peonies.

Propagation

One of the advantages of perennials is that most can be divided easily and replanted. Division is simply accomplished by digging the whole plant from the soil and dividing it up into smaller plants. Division can be done by pulling the roots, crown and leaves apart or by using a clean knife, to cut the segments. Larger plants can be divided using a pair of garden forks placed back-to-back in the center of the clump and prying them apart. Other methods of propagation include; stem cuttings (chrysanthemums), root cuttings (phlox) and rooting rhizome pieces (iris).

Perennials for Wet Sites

Common Name	Scientific Name
Hardy Aster	*Aster* spp.
Astilbe	*Astilbe* spp.
Bellflower	*Campanula* spp.
Yellow Foxglove	*Digitalis grandiflora*
Globe Thistle	*Echinops* spp.
Cushion Spurge	*Euphorbia epithymoides*
Heliopsis	*Heliopsis helianthoides*
Rose Mallow	*Hibiscus moscheutos*
Hosta	*Hosta* spp.
Siberian Iris	*Iris sibirica*
Cardinal Flower	*Lobelia cardinalis*
Purple Loosestrife	*Lythrum salicaria*

Perennials for Dry Sites

Common Name	Scientific Name
Yarrow	*Achillea* spp.
Golden marguerite	*Anthemis tinctoria*
Rock cress	*Arabis* spp.
Sea thrift	*Armeria maritima*
Wormwood	*Artemisia* spp.
Butterfly weed	*Asclepias tuberosa*
False indigo	*Baptisia australis*
Perennial cornflower	*Centaurea montana*
Tickseed	*Coreopsis* spp.
Pinks	*Dianthus* spp.
Globe thistle	*Echinops* spp.
Spurge	*Euphorbia epithymoides*
Blanket flower	*Gaillardia* spp.
Baby's breath	*Gypsophila paniculata*
Daylily	*Hemerocallis* hybrids
Torch lily	*Kniphofia* spp.
Lavender	*Lavandula augustifolia*
Blazing star	*Liatris spicata*
Maltese cross	*Lychinis chalcedonica*
Evening primrose	*Oenothera macrocarpa*
Beard tongue	*Penstemon* spp.
Coneflower	*Rudbeckia fillgida*
Sage	*Salvia* spp.
Soapwort	*Saponaria ocymoides*
Stonecrop	*Sedum* spp.
Speedwell	*Veronica* spp.

Perennials for Shade

False spirea	*Astilbe* spp.
Bergenia	*Bergenia cordifolia*
Anchusa	*Anchusa myosotidiflora*
Lily of the Valley	*Convallaria majalis*
Geranium	*Geranium* spp.
Daylily	*Hemerocallis* hybrids
Coralbells	*Heuchera sanguined*
Hosta	*Hosta* spp.
Siberian iris	*Iris sibirica*
Bluebells	*Mertensia virginica*
Forget-me-not	*Myosotis* spp.
Soloman's seal	*Polygonatum* spp.
Primrose	*Primula* spp.
Meadow rue	*Thalictmm* spp.
Globeflower	*Trollius* spp
Violet	*Viola* spp.

Low Maintenance Perennials

Fern-leaf yarrow	*Achellia filipendulina*
Butterfly weed	*Asclepias tuberosa*
Bergenia	*Bergenia cordifolia*
Bellflower	*Campanula* spp.
Tickseed	*Coreopsis* spp.
Bleeding heart	*Dicentra spectabilis*
Purple coneflower	*Echinacea purpurea*
Globe thistle	*Echinops* spp.
Daylily	*Hemerocallis* spp.
Hosta	*Hosta* spp.
Siberian iris	*Iris sibirica*
Blazing star	*Liatris spicata*
Purple loosestrife	*Lythrum salicaria*
Oriental poppy	*Papaver orientale*
Balloon flower	*Platycodon grandiflorus*
Stonecrop	*Sedum spectabile*